

Application No. 10/044,503
Amendment dated November 28, 2005
Reply to Office Action of July 26, 2005

REMARKS

Interview with the Examiner

A telephonic interview was conducted on November 16, 2005 between Examiner Kassa and the undersigned. The interview included a discussion of the Takiguchi reference and how it was being applied against the claims of the instant application. No agreement was reached.

Status Of Application

Claims 1-13 are pending in the application; the status of the claims is as follows:

Claims 1, 2, and 6-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,128,416 to Oura ("Oura"), and further in view of U.S. Patent No. 6,549,681 B1 to Takiguchi et al ("Takiguchi").

Claims 3-5, 12, and 13 are objected to as being dependent upon a rejected base claim, but allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Amendments

Claims 1, and 9-11 have been amended to clarify a feature of the claimed invention. These changes do not introduce any new matter.

35 U.S.C. § 103(a) Rejection

The rejection of claims 1, 2, and 6-11 under 35 U.S.C. § 103(a), as being unpatentable over Oura, and further in view of Takiguchi, is respectfully traversed based on the following.

Both Oura and the instant claims relate to joining partially overlapping images to create a larger composite image. However, Oura and claim 1 differ in that Oura relates to determining the overlap between the images and claim 1 relates to calculating the pixel values in the composite image *after the overlap has been determined*. Indeed, the apparatus disclosed by Oura could be used as the “overlap region determining section” recited in claim 1, i.e., the first claim element. Oura does not appear to provide any disclosure related to calculating the pixels in the composite image except to state that the apparatus performs “processing for interpolating the image to compose in accordance with a calculated displacement amount.” See column 5, lines 31-34. The flowchart of Fig. 7 merely states “image composing processing” in blocks S6, S10, and S15. And Fig. 18A only shows how to interpolate pixels in areas where the images do not overlap. In light of the foregoing, it is respectfully submitted that Oura does not teach how to determine pixel values in the overlap region of a composite image.

Moreover, claim 1 has been amended to recite, *inter alia*, “a region determining section which determines first and second regions within the overlap region based on differences in pixel values between the two images.” That is, the overlap is divided into two regions based on the differences between the values of corresponding pixels in the two images. The Office Action suggests determining the first and second regions corresponds to setting the reference blocks 5 and 6 in Oura. See Office Action, page 3, citing Oura column 5, lines 20-24. However, reference blocks 5 and 6 are set using only the reference image. See column 5, lines 54-56. It is respectfully submitted, therefore, that setting reference blocks 5 and 6 as taught by Oura cannot correspond to determining first and second regions based on pixel differences are required by claim 1. It is further submitted that this feature of claim 1 is also not taught by Takiguchi. Accordingly, the combination of Oura and Takiguchi is distinguished by claim 1, as well as by claims 2 and 6-8 which depend therefrom.

Claim 9, as amended, recites a step of “determining first and second regions within the overlap region based on whether a difference between corresponding pixels in

the two adjacent images exceeds a threshold level.” As provided above, in respect of claim 1, neither Oura nor Takiguchi disclose, teach, or suggest that the first and second regions of the overlap region are determined based on a difference between corresponding pixels of the input images. It is respectfully submitted therefore, the combination of Oura and Takiguchi is distinguished by claim 9.

Claim 10, as amended, recites a “computer readable medium storing an image processing method comprising the steps of ... determining first and second regions within the overlap region based on whether a difference between corresponding pixels in the two adjacent images exceeds a threshold level.” As provided above, in respect of claim 1, neither Oura nor Takiguchi disclose, teach, or suggest that the first and second regions of the overlap region are determined based on a difference between corresponding pixels of the input images. It is respectfully submitted therefore, the combination of Oura and Takiguchi is distinguished by claim 10.

Claim 11, as amended, recites a method including a step of “comparing, within the region of overlap, predetermined blocks of pixels in the first image with corresponding predetermined blocks of pixels in the second image to determine if a pixel value of the corresponding blocks of pixels differs by a threshold amount” and “identifying the predetermined blocks of pixels as belonging to a first region of pixels or a second region of pixels based on the comparison.” As provided above, in respect of claim 1, neither Oura nor Takiguchi disclose, teach, or suggest that identifying blocks of pixels as being in first or second regions of the overlap region based on a difference between corresponding blocks of pixels in the input images. It is respectfully submitted therefore, the combination of Oura and Takiguchi is distinguished by claim 11, as well as by claims 12 and 13 which depend therefrom.

Accordingly, it is respectfully requested that the rejection of claims 1, 2, and 6-11 under 35 U.S.C. § 103(a) as being unpatentable over Oura, and further in view of Takiguchi, be reconsidered and withdrawn.

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CONCLUSION


Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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November 28, 2005